# Lobster farming viable

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NORWEGIAN Lobster Farm (NLF) has developed what it claims is a commercial and cost-effective technology for making the farming of lobsters and similar cannibalistic crustaceans an economically viable business.

Established in 2000 by Ivar KollsgŒrd, Asbj¿rn Drengstig, Rudolf Svensen and Dr Tormod Drengstig, NLF has managed a major research and development project on the island of Kvits¿y, near Stavanger, in southern Norway, which was designed to reveal the lobster's preferences for feed, substrate, shelter, water quality and cage rearing space in intensive farming systems.

A prototype of the newly patented technology has been under comprehensive testing, and the building of a larger scale commercial farm on Kvits¿y began in March 2005 with production set to begin in July/August.

'Total investment in the new farm is around NOK15 million [$2.35 million], ' NLF's Asbj¿rn Drengstig, a marine biologist, tells Seafood International. 'We are working on finding partners [investors], and hope to manage a realisation within three to four months from now. The total yearly production capacity will initially be 23 tonnes and increase to 70 tonnes after five years.' In addition, NLF is now manufacturing, distributing and selling technology for farming crustaceans in land-based systems. This technology is also well suited for other marine crustaceans such as langoustine, crayfish and king crab, claims the company.

NLF carried out the R&D project in close co-operation with Norway's Institute of Marine Research, Stavanger University College, RF-Rogaland Research and the Norwegian Institute of Fisheries and Aquaculture.

Several private companies also contributed to the project.

First producer of plate-sized lobster

IT WAS through this project that NLF became the first commercial producer of platesized lobster in Norway, and the first in the world to have produced lobsters from hatching to platevsize solely on a formulated feed, says Mr Drengstig.

Research shows that portion sized lobster has substantial market potential and that the market for plate-sized lobsters is large, both domestically and internationally.

In Norway itself there has been a positive response to the 'new' plate-sized product regarding both size and weight (21cm/300g), especially in the high-end segment. The majority of consumers considered this to be adequate for the restaurant market and direct sales to private consumers accepted the size.

Hovever, most supermarkets and grocery stores requested a bigger size (400v500g) and Norway's future sea-ranching companies might be able to meet this demand. Furthermore, there exists a considerably higher global market demand (approximately 40,000 tonnes annually), vith Scandinavia, Europe and Asia the predominant markets.

KPMG (2003) estimated and summarised the global market demand for live lobster and lobster products as:

frozen plate-sized lobster:

50,000 tonnes annually;

fresh, bigger (> 500 g) lobster: 1000 tonnes annually; and live lobster (250v300 g):

60,000v70,000 tonnes annually.

Tests have been conducted in order to evaluate the product quality of the farmed lobsters at the Culinary Institute in Stavanger, Norway. Tests included evaluation of texture, taste, colour, shell thickness etc. The lobsters vere both boiled and fried.

The overall conclusions vere positive regarding the most important aspects such as texture, taste, size and food content, and the panel displayed a general positive response to the product.

Hovever, the lack of natural colour and a thinner shell of the first lobsters vere considered to be minor drawbacks. These aspects have been improved by using a specially manufactured lobster feed with astaxanthin for the last 12 months, and a netest is currently underway at the Culinary Institute.